

U.S.S.N. 09/380,773

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AMENDMENT AND RESPONSE TO OFFICE ACTION

c)] culturing [the cell] recombinant cells under conditions suitable for the production of the polyester[; and

b'
corel.

isolating the polyester from the cell] wherein the recombinant cells express a polyhydroxyalkanoic acid synthase protein and have been genetically engineered to express a fatty acid:acyl-coenzyme A transferase protein.

50. (amended) The method of claim 38, wherein the culture contains materials selected from the group consisting of 4-hydroxybutyric acid, the sodium salt of 4-hydroxybutyric acid, γ -butyrolactone, 1,4-butanediol, 4-hydroxyvaleric acid, γ -valerolactone, 1,4-pentanediol, 3-hydroxybutyric acid, the sodium salt of 3-hydroxybutyric acid, a hydroxypropionic acid, a hydroxybutyric acid, a hydroxyvaleric acid, a hydroxycaproic acid, a hydroxyheptanoic acid, a hydroxyoctanoic acid, a hydroxydecanoic acid, γ -caprolactone, γ -heptanolactone, γ -octanolactone, or γ -decanolactone.

b²

52. (amended) The method of claim 38, wherein the cell is [further capable of producing] genetically engineered to express a heterologous protein capable of hydrolysing a lactone to the corresponding hydroxyalkanoic acid.

sub
e
b³

53. (amended) The method of claim 38, wherein the cell is [further capable of producing] genetically engineered to express a heterologous 2-oxyglutarate decarboxylase protein and a heterologous 4-hydroxybutyrate dehydrogenase protein.

54. (amended) The method of claim 38, wherein the cell is [further capable of producing] genetically engineered to express a heterologous protein selected from the group consisting of a 2-methylcitrate synthase protein, a 2-methylcitrate dehydratase protein, 2-methylisocitrate

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*sub
C2
cont'd*

dehydratase protein, 2-methylisocitrate lyase protein, a succinate:acetyl-Co A transferase protein, a succinate-semialdehyde dehydrogenase protein, and a 4-hydroxybutyrate dehydrogenase protein.

*B3
cont.*

55. (amended) The method of claim 38, wherein the cell is [further capable of producing] genetically engineered to express a succinate-semialdehyde dehydrogenase protein, and a 4-hydroxybutyrate dehydrogenase protein.

56. (amended) The method of claim 38, wherein the cell is [further capable of producing] genetically engineered to express a 2-methylcitrate synthase protein, a 2-methylcitrate dehydratase protein, a 2-methylisocitrate dehydratase protein, a 2-methylisocitrate lyase protein, a succinate:acetyl-Co A transferase protein, a succinate-semialdehyde dehydrogenase protein, and a 4-hydroxybutyrate dehydrogenase protein.

Please cancel claims 62-63.

Please add the following new claim 64.

*B4
D4*

64. (New) The method of claim 38 further comprising separating the polyester from the recombinant cells.

Remarks

Amendments to the Claims

The claims were previously restricted into three groups, group I, claims 1-25 and 62-63; group II, claims 26-38; and group III, claims 38-61. The non-elected claims have been cancelled.